Inyo County

Comments on the Preapproval Draft Environmental Assessment (EA): Intermodal Transportation of Low Level Radioactive Waste to the Nevada Test Site

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November 30, 1998

Mr. Michael G. Skougard U.S. Department of Energy Nevada Operations Office P.O. Box 98518 Las Vegas, NV 89193

Dear Mr. Skougard:

COMMENTS ON THE PREAPPROVAL DRAFT ENVIRONMENTAL ASSESSMENT (EA): INTERMODAL TRANSPORTATION OF LOW LEVEL RADIOACTIVE WASTE TO THE NEVADA TEST SITE.

The staff of the Inyo County Planning Department have reviewed the Preapproval Draft Environmental Assessment entitled, "Intermodal Transportation of Low-level Radioactive Waste to the Nevada Test Site. Inyo County in its role as an Affected Unit of Local Government (AULG) submits the following comments:

General Comments

The methodology used for the assessment of risk contained in this EA runs contrary to virtually every prior risk assessment performed for the transportation of radioactive materials. Prior risk assessments have used two key factors to reduce radiological risk: use the interstate highway system to the extent practicable, and; reduce time in transit [See 49 CFR 397.101]. Using population avoidance as the primary criteria for route selection may be justifiable, but such a departure from accepted practice requires an explicit discussion of the rationale for the change, including a comparison of the routes selected using each methodology.

The radical change in routing risk assessment methodology raises several questions. Is this just Nevada Operations Office policy, or will it become the new standard throughout the Department of Energy (DOE)? Will this change be applied uniformly across all routes, shippers, and carriers? The recent tender offer by Tri-State Motor Transport that offers to bypass the Las Vegas Valley is a case in point. Will those shipments also bypass other population centers along the transport routes? Certainly, if the rationale of population avoidance is valid in one instance, it must be applied uniformly. The resulting increased transit times, distances, risks and costs must be considered in this EA.

Specific Comments

1.1.1 Background

The discussion of the genesis of the EA is different than the discussion in the NTS Intermodal Transportation Facility Site and Routing Evaluation Study (DOE,1998). It is also different than the actual events. As correctly stated in the Evaluation Study, the EA developed from a Fernald proposal to conduct an intermodal demonstration, using the Valley rail siding outside of Las Vegas as the intermodal transfer site.

1.1.2 Purpose and Need

The stated purpose of this EA is "to identify environmental impacts and transportation risks of using rail shipments to intermodal transfer sites and alternative truck routes for delivery of LLW to the NTS" (Page 1-3, lines 28-30). The proposed federal action that triggered this EA was the Fernald proposal to conduct an intermodal demonstration program, using the Valley Intermodal facility as the intermodal transfer site. However, this alternative is not considered or analyzed in the EA. The alternative of rail transport to the Valley siding, with truck transport from that point to the NTS must be considered and analyzed.

2.0 Description of the Proposed Action and Alternatives Introduction

- 1. Page 2-1, Lines 38 through 41 state, "The total number of shipments of LLW considered in this assessment are those used in the NTS EIS for the expanded use alternative. The NTS EIS assumed 25,084 truck shipments of LLW over a 10-year period (not including NTS LLW)". However, the Final Waste Management Programmatic Environmental Impact Statement (PEIS) [Final Waste Management Programmatic Environmental Impact Statement, DOE/EIS-200, May 1997] describes regional and centralized disposal alternatives that would greatly increase the volumes of waste transported for disposal. In the discussion of cumulative impacts, the PEIS estimates a total volume (including HLW, LLW and LLMW) of 295,000 truck shipments, or about 118 shipments per day [Final Waste Management Programmatic Environmental Impact Statement, DOE/EIS-200-F, page 85, May 1997]. This is in stark contrast to the 7 shipments per day analyzed in this EA. The EA must consider the potential volumes of material that will be shipped to the NTS following the Record of Decision on the PEIS.
- 2. <u>Page 2-5, Lines 11 and 12 state</u>, "The facility may not be able to accommodate alternative LLW packing with current equipment. Storage space for containers is limited". A description of what alternative LLW packing should be included. How will the lack of proper equipment and storage be addressed and is it addressed in other areas of this document?
- 3. Page 2-8, Lines 42 through 44 state, "Although the rail facilities are extensive, they are used primarily to support military training exercises at nearby Fort Irwin. It also handles radioactive materials and has emergency response capabilities". Will the military operations be affected if the Yermo, California intermodal site is chosen? Is this a viable alternative based upon the potential for military exercises to take precedence and the possibility of interrupting shipments? What type of emergency response capabilities does the Yermo facility have, are they adequate, and are they solely for the military operations or could they be used for the LLW shipments? Has the military agreed to the use of their facilities for this proposed purpose?
- 4. <u>Page 2-13</u>, Lines 20 and 21, Please indicate which portions of the route cross or are adjacent to the Mojave National Preserve.
- 5. Page 2-13, Lines 24 through 26 state, "The results of the study eliminated three more potential transfer sites: (1) the UP Apex siding northeast of the Las Vegas Valley, (2) the Valley Intermodal facility near North Las Vegas, and (3) the UP Dunn siding in southeastern California." The NTS Intermodal Transportation Facility Site and Routing Evaluation Study (DOE, 1998) did not conclude that these sites should be eliminated [NTS Intermodal Transportation Facility Site and Routing Evaluation Study (DOE, 1998), January, 1998, page 7]. At a minimum, the Valley Intermodal facility, which was the original proposed action, should be evaluated.
- 6. <u>Pages 2-14 and 2-15</u>, Table 2-1, This table outlines blanket assumptions and does not indicate where the information that the statements are based upon is located in the document. Please include information which provides basis for the conclusions in the table or indicate where in the document the conclusions are supported.
- 7. Page 2-17 through 2-19, This section discusses the radiological risk of the various alternatives, however, it does not put into perspective the relative radiological risk, compared to the other risks of

transportation. Given the small risk values for radiological risk, does the proposed use of alternative routes, that increase distance and time in transit, and consider the use of routes that are neither interstate or U. S. highways, increase the total risk in the transportation of these materials?

8. Page 2-18, Lines 29 through 31, What type of "interference" would be encountered with the MCLB Annex and how does this affect the Yermo site as a possible alternative?

3.0 Affected Environment

- 9. Page 3-7, Lines 27 through 29, How will the extreme summer temperatures along this route affect the shipping of material, does this increase the radiological or accident risk? And how will shippers be notified if there is a flooding problem? If a shipper is caught in a flood how will the containment and clean up be handled? How will measures be taken to prevent a shipper from being caught in a flood situation?
- 10. Page 3-7, Line 39, How will the sight distance at this intersection increase the risk of an accident? Will the intersection be improved to increase sight distance?
- 11. Page 3-7, Lines 44 through 46, How will the extreme summer temperatures for long periods of time affect the waste packages and the containers? Is there an increased risk for a radiological leak or spill? Have the waste packages been tested under these conditions?
- 12. Page 3-8, Lines 1 through 3, Will the shipping route be altered during rainy periods to reduce the risk of a shipment being involved in a flood situation? How will the shipper be notified that there are potential flooding problems?
- 13. <u>Page 3-10, Line 21</u>, This junction is the southern entrance to Death Valley National Park, this should be included in the text as an indication of the tourist traffic experienced on this route.
- 14. <u>Page 3-13</u>, <u>Lines 10 through 13</u>, How will the issue of the trucks overheating be addressed? Will there be an alternate route if there are extreme summer temperatures? How will a truck be moved or repaired if it overheats and how will the radioactive cargo be moved?
- 15. Page 3-13, Line 12 and 13, What "tourist area" is being referenced and if it is different than Shoshone it should be included in the text.
- 16. Page 3-13, Line 20, This sentence notes that sight distance is poor. If there is an accident at this location how will emergency responders be notified? How will an accident and clean-up affect access into Death Valley National Park?
- 17. Page 3-20, Lines 18 and 19, The route between Barstow and the NTS is adjacent to Death Valley National Park for several miles this needs to be included in the text.
- 18. Page 3-29, Lines 42 and 43, Does the Yermo facility have the capability of handling radioactive materials and responding to accidents for non-military radioactive material?
- 19. Page 3-30, Lines 28 and 29, "...because accidentally released materials will remain on or very close to the roads.", how was this conclusion arrived at? What evidence or history is this conclusion based upon? If there is no supporting evidence this language should be removed from the document. Why is this issue raised at this point and no where else in the document? This needs to be addressed in Section 4.0 Environmental Impacts.
- 20. Page 3-31, Lines 15 and 16, The language "...potentially would be found on the highway", is very vague, either the species have been found on the highway or have not, please clarify.

- 21. Page 3-31, Lines 16 and 17, "...varies along the length of the route.", this language is not specific enough, where does the desert tortoise occur along the route?
- 22. Page 3-31, Lines 17 through 19, Does the route cross any critical habitat for the desert tortoise? If yes, please include details of where that critical habitat is located. Is the route near or adjacent to any critical habitat for the devils hole pupfish?
- 23. <u>Page 3-31, Lines 19 and 20</u>, What is the extent of the amargosa vole habitat? Does it cross the route more than once? What are the extent of the marshes along the amargosa river? Is there any other habitat along the route that is not amargosa river marsh area that does support the amargosa vole?
- 24. Page 3-32, Lines 41 and 42, Is the intermodal facility at Yermo Annex within critical habitat for the desert tortoise?
- 25. <u>Page 3-33</u>, <u>Lines 26 through 31</u>, What are the exact areas of the desert tortoise critical habitat areas mentioned in this paragraph?
- 26. Pages 3-33 through 3-35, Cultural resources along the proposed routes, such as the Amargosa Opera House (located at the previously discussed curve with reduced speed and constrained sight distance) must also be addressed.
- 27. Page 3-36, Lines 7 and 8 and Page 3-37, Lines 3 and 4, With this type of soil and wind erosion how will a spill be contained and cleaned up? How will air quality be affected? Have these two issues been addressed in section 4.0 Environmental Impacts?
- 28. <u>Page 3-38, Line 14</u>, Are the San Bernardino Environmental Health Services and the San Bernardino County hazardous material Response Team trained to respond to radiological materials incidents and accidents?
- 29. Page 3-38, Lines 9 through 25, Are the local emergency responders currently equipped and trained to handle radiological spills and accidents?
- 30. Page 3-43, Lines 18 through 31, Are the local emergency responders currently equipped and trained to handle radiological spills and accidents?

4.0 Environmental Impacts

- 31. Page 4-1, Lines 27 and 28 state, "The use of alternative transportation modes and routes may result in a reduction in potential risk to the public." This statement is not supported by analysis within the EA. While your analysis purports to show a reduction in radiological risk by avoiding the Las Vegas Valley, there is no analysis of the total risk for each route. Weighting your analysis to favor population avoidance instead of minimizing time in transit and using the best available roads insures an increase in the total risk for these shipments. Please include an comparative analysis of the total risk for each route, including the Valley Intermodal facility.
- 32. Page 4-3, Section 4.2.1.1 Transportation, This section again uses the NTS EIS estimates for total number of shipments (25,084), rather than referring to the PEIS which describes a maximum number of shipments of 295,000. All such references throughout the EA should be amended to reflect the higher number, and all conclusions should be based on the higher number.
- 33. Page 4-3, Section 4.2.1.2 Land Use, This section does not include any discussion of the Mojave National Preserve, Hollow Hills Wilderness or the Saddle Peak Wilderness all of which are adjacent to the proposed route either along Highway 15 or Highway 127 (maps enclosed). Please include a discussion of how this transportation route would affect these areas.

- 34. Page 4-3, Lines 31 through 34 and Page 4-14, Lines 32 and 33, Will the increased truck traffic increase the potential for accidents at major intersections? How will an accident affect the ability of tourists to access Death Valley National Park? What is the potential for an accident and a radiological spill at the two intersections where there is limited sight at turns? If this alternative is chosen can this accident potential be reduced?
- 35. Page 4-3, Lines 38 and 39 and Page 4-14, Lines 44 through 46, What about the increased traffic along the route into Death Valley National Park? What are the impacts to Death Valley National Park if there is an accident or a radiological spill along the route? What affects are there to the transportation along the route adjacent to Death Valley National Park and the intersection leading into Death Valley National Park? What are the impacts to the Wilderness Areas adjacent to the route (east) if there is an accident or radiological spill? Will this affect the public's ability to access these areas?
- 36. Page 4-4, Line 15 and 16 and Page 4-15, Lines 25 and 26, How will a radiological spill at the intermodal site, which has the highly wind erosive Cajon sand, be contained and not impact the air quality?
- 37. Page 4-4, Line 20 and Page 4-15, Line 30, Due to the high permeability of the Cajon sand, how will a radiological spill affect the water resources? How will a radiological spill be contained to prevent contamination of the limited water resources? What is the proximity of water wells to the proposed intermodal site? What is the proximity to the water table to the proposed intermodal site?
- 38. Page 4-4, Lines 44 and 45 and Page 4-15, Lines 34 through 45, The potential radiological exposure to the general population is not addressed and needs to be. Could the general population be exposed either through the water supply or through airborne contamination?
- 39. Page 4-5, Table 4-1 and 4-2, Neither table addresses the potential radiological risk to the general population, if that is not addressed elsewhere in the document, it should be addressed here. In addition, what is the risk based upon the current equipment and preparedness of the available emergency responders? Radiological risk may be reduced by reducing the exposure to population centers, however, if there are no properly trained emergency responders, doesn't this increase the radiological risk and is this issue addressed?
- 40. Page 4-5, Lines 15 through 20 and Page 4-15 Lines 34 through 45, How would the risk of radiological exposure be reduced if there were a fire? Are there adequately trained emergency responders and equipment? What if there is a fire on the vehicle travelling the route, how will containment of the fire be accomplished? How will containment of the radiological materials be accomplished. Note that a significant portion of State Route 127 in Inyo County effectively has no fire response coverage.
- 41. Page 4-6, Section 4.2.1.9 and Page 4-11 4.2.2.9, Biological Resources, The proposed route is adjacent to the Hollow Hills Wilderness. As stated in the "Bureau of Land Management Wilderness Areas" June 1995 document the Hollow Hills Wilderness may contain both Desert tortoise and the Mojave fringe-toed lizard. This issue needs to be addressed in this alternative. What are the potential impacts to these species?
- 42. Page 4-6, Lines 30 through 32 and Page 4-16, Lines 25 through 27, These two sentences do not address the potential impacts along the route. What will the potential impacts to the desert tortoise habitat be? What will the potential impacts to the amargosa vole be? What will the impacts be to these to endangered species be if there is an accident and/or radiological spill either via ground or air?
- 43. Page 4-7, Lines 8 and 9 and Page 4-17, Lines 3 and 4, Under this alternative could the soils be a conduit for transporting radioactive material into the water supply or into the air, since it is a highly erosive and permeable soil type?
- 44. Page 4-7, Line 13 and page 4-17, Line 8, How was this conclusion arrived at? What if there is a radiological spill along the route (Highway 127) which is the southern access into Death Valley National

- Park? How will traffic and access be affected if there is an accident and radiological spill? Potentially the highway could be closed for several hours or days. How will this impact the socioeconomics of Death Valley National Park? What if there are multiple accidents? How will they cumulatively impact Death Valley National Park?
- 45. Page 4-15, Lines 41 through 45, The comparison between a rail route to Barstow and a truck route from that point to the NTS cannot be usefully compared to a rail route to Barstow and a truck route that travels out of its way to go through the Las Vegas Valley. The comparison that must be made is between the first route and the route originally proposed as the action to be taken, which was rail to Valley and a truck route from that point to the NTS.
- 46. <u>Page 4-17</u>, <u>Lines 23 through 29</u>, How were these conclusions reached? How was the exposure to the general public determined? What is the potential for exposure if there was an accident? What areas are more prone to accidents and therefore have more potential for radiation exposure?
- 47. Page 4-20, Lines 22 and 23 and Page 4-22, Lines 7 and 8, What information was used to determine the impacts would be negligible? Please define negligible.
- 48. Page 4-20, Lines 23 through 25 and page 4-22, Lines 8 through 10, "...contaminants will be contained within the highway and adjacent disturbed areas.", How was this conclusion reached and what information is it based upon? Please describe what "adjacent disturbed areas" are and were they disturbed prior to a radiological spill? What areas along the route are "adjacent disturbed areas"?
- 49. Page 4-20, Lines 25 through 27 and 4-22 Lines 10 through 12, The issue of an accident near or in a perennial stream is only addressed in this section of the document, it needs to be addressed for all of the transportation routes. What are the percentages of "these areas" on each of the alternative routes? How was the one (1) percent determined on this route? The issue of flooding and a potential radiological spill is not addressed in the document, why not? What is the risk of a radiological spill during a flood in a wash and what percentage of all of the routes are comprised of washes?
- 50. <u>Page 5-1</u>, <u>Line 28 through 45</u>, The cumulative impact discussion here should parallel the discussion of cumulative impacts in the PEIS. This requires a discussion of substantially greater shipment volumes than discussed in the EA.
- 51. Page 5-9, Section 5.2.2, states, "Trucks carrying LLW may occasionally contribute to traffic delays if they encounter heavy-haul trucks from the Yucca Mountain Project following the same route to the NTS." Why has this issue only been mentioned once in the cumulative impacts section? If the heavy haul trucks could cause delays on the route why hasn't this issue been fully addressed in the cumulative impacts section? The issue of heavy haul trucks needs to be fully and completely addressed in this section. Please refer to Comment #32 for a discussion of traffic volumes and cumulative impact.
- 52. Page C-31, Lines 5 through 19, Did the analysis take into account the existing emergency responders and their level of training for the primary and secondary routes? How does this affect the risk associated with each route?
- 53. Page D-1, Section D.0, Although this section was requested by "local officials" as stated on Page 2-4 it is lacking in detail and useful information. If this section is intended as a part of the project or as a mitigation measure it is inadequate and needs much more information if it is intended to "augment local emergency response capabilities".

To summarize, Inyo County considers it essential that the EA be revised to:

- Justify the change in risk assessment methodology from the accepted practice of minimizing time in transit and using the interstate highway system;
- Analyze the Valley Intermodal facility alternative;
- Use the PEIS shipment volume estimates when analyzing potential impacts;
- Compare the total risk of each alternative;

- Perform the environmental assessment along the transportation routes, not just at the intermodal transfer sites; and
- Evaluate each alternative's entire transportation route, not just the portion from the intermodal site to the NTS.

Thank you for the opportunity to comment on the Preapproval Draft Environmental Assessment entitled, "Intermodal Transportation of Low-level Radioactive Waste to the Nevada Test Site. Inyo County staff is confident that the county's comments will be addressed as a part of the final Environmental Assessment document.

Sincerely,

Vanessa Mongeon Associate Planner Inyo County Planning Department Brad Mettam Yucca Mountain Project Coordinator Inyo County Planning Department

Enclosures: Maps and descriptions of the following areas

Death Valley National Park Mojave National Preserve Hollow Hills Wilderness Saddle Peak Hills Wilderness Resting Spring Range Wilderness

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